DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-006133 Address: 333 Burma Road **Date Inspected:** 20-Mar-2009

City: Oakland, CA 94607

OSM Arrival Time: 645 **Project Name:** SAS Superstructure **OSM Departure Time:** 1845 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: Yu Dongping / You Qiguo / Li LinCWI Present: Yes No

Inspected CWI report: N/A **Rod Oven in Use:** Yes No Yes No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A

Yes No **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** TOWER COMPONENTS

Summary of Items Observed:

On this date, the Caltrans OSM Quality Assurance (QA) Inspector, "Victor" KS Narayan was present during the times noted above for observations relative to work performed.

Bay 11 – TOWER ASSEMBLY:

I. Lift 3 – Skin Plates' butt welding:

Weld process, SAW of butt weld joints located on PCMK: Lift 3-East Tower Skin "B" plate butt welds. The weld designation numbers and the welder was identified as follows.

ESD1-FBSA3-2A/C-2A(B) - CJP: The welder was identified as Wu Aixiang and the welder number was identified as 040772.

The ZPMC CWI was identified as Li Lin and the ABF representative was identified as Zhang Jicai. The welding variables recorded by QC appeared to comply with applicable WPS, WPS-B-T-2221-B-U3C-S-Z for CJP weld joint.

II. Struts' welding:

Weld process, SMAW of PJP weld joints located on PCMK: North Tower struts. The weld designation numbers and the welders were identified as follows.

ND1-A467-38M-6A(B), 4A(B), 1A(B): The welder was identified as Yang Zaihua and the welder # was identified as 040669.

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ND1-A468-23M-1-26A(B), 28A(B): The welder was identified as Cao Jianbin and the welder # was identified as 058009.

ND1-A468-23M-1-3A(B): The welder was identified as Zhu Zeyuan and the welder # was identified as 053916.

The ZPMC CWI was identified as Yu Dongping and the ABF representative was identified as Wang Chenjun. The welding variables recorded by QC appeared to comply with applicable WPS, WPS-B-T-3212-Tc-U5b-1 for PJP weld joints.

III. Base shear plate stiffeners' welding:

Weld process, FCAW of PJP weld joints located on PCMK: Stiffener plates on BASE SHEAR PLATE of EAST TOWER. The weld designation numbers and the welders were identified as follows.

ED1-A29A/B-78: The welder was identified as Xu Hua and the welder number was identified as 049220.

ED1-A29A/B-79: The welder was identified as Li Haidong and the welder number was identified as 047701.

ED1-A29A/B-82: The welder was identified as Zhang Binghua and the welder number was identified as 053316.

ED1-A29A/B-83: The welder was identified as Wang Bing and the welder number was identified as 040713.

ED1-A29A/B-18: The welder was identified as Liu Jun and the welder number was identified as 202821.

ED1-A29A/B-19: The welder was identified as Li Zhaoqian and the welder number was identified as 048810.

ED1-A29A/B-22: The welder was identified as Wang Yinsheng and the welder number was identified as 040775.

ED1-A29A/B-23: The welder was identified as Huang Guoqi and the welder number was identified as 059525.

The ZPMC CWI was identified as You Qiguo and the ABF representative was identified as Xie Yan. The welding variables recorded by QC appeared to comply with applicable WPS, WPS-B-T-2332-Tc-P5-F.

ULTRASONIC TESTING:

Bay 11 – Tower Assembly:

This QA Inspector performed 10% UT of area previously tested by ZPMC UT personnel. This QA Inspector generated a TL-6027 UT report on this date. The member was identified as Lift 2 – West Tower Skin "D" T weld joint.

The weld designation numbers are as follows.

WSD1-SA209 D/D-1 A/B

WSD1-SA209 D/D-7 A/B

WSD1-SA209 D/D-21 A/B

This QA Inspector performed 10% UT of area previously tested by ZPMC UT personnel. This QA Inspector generated a TL-6027 UT report on this date. The member was identified as Lift 3 – West Tower butt weld joint. The weld designation number is as follows.

WSD1-SA209 D/D-1A/B

Unless otherwise noted, all observations on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No relevant conversations

This report is for the purpose of determining conformance with the contract documents and is not for the purpose

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of making repair or fit for purpose recommendations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Serge Sinevod (134-825-70045), who represents the Office of Structural Materials for your project.

| Inspected By: | Narayan,Victor | Quality Assurance Inspector |
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| Reviewed By: | Clifford,William | QA Reviewer |